

64.—CARP CULTURE IN CHINA.*

By E. J. SMITHERS.

[Dispatch No. 125 to the State Department.]

The cultivation of carp from the spawn in this province appears to be unknown. This may be attributed to the great abundance of this description of fish to be found in the Yangtse and in the numerous canals which intersect the province.

Very small carp are preserved alive by the fishermen and sold in the markets to the farmers, who place them in their irrigating ponds, where they are fed until large enough for use. In the adjoining province of Anhui and in that of Kiangsi the collection of spawn in the waters of the Yangtse has been carried on from time immemorial, and forms at the present time a very large industry. Hundreds of small boats arrive in the Yangtse during the month of April, coming from the Poyang Lake and its many tributaries. The spawn is collected in spawn nets, which are made by suspending very fine cloth from two bamboo poles which are fastened together in the shape of the letter V. At the point of the net a basket about a foot square is suspended so as to catch the spawn which find their way into the net. These baskets are emptied several times during the day into large water-jars, where the spawn is kept until the boat is ready to leave with its cargo, the eggs which float near the surface are considered inferior and are separated from the rest. The Chinese say that the carp's eggs are the heaviest and consequently settle on the bottom of the jars. The water in these jars is frequently changed during the day and the spawn nourished on gruel made from the upland or glutinous rice. When sufficient spawn is collected they are placed in small earthen jars or bamboo baskets, which are deposited on shelves arranged in tiers around the boat. Each boat contains about two hundred jars.

At the end of June the boats start for the upper waters of the Poyang Lake and other tributaries of the Yangtse. During the voyage the water in the jars is frequently changed and the spawn fed on gruel. At different points on the route the natives congregate to purchase the spawn, which is sold to them by the measure. When the boats arrive at their destination the remainder of the spawn, which has now reached a considerable stage of development, is placed in feeding

*In the latter part of 1884 Mr. John Russell Young, the minister to China, requested the several United States consuls to report to the legation on the subject of carp culture in that Empire. With the exception of three consuls, whose statements are here printed, they reported that carp culture was not practiced in their districts. These three statements have been transmitted to the Fish Commission by the courtesy of the Secretary of State.

ponds. Here they are fed on gruel and the refuse obtained after extracting the oil from rape-seed. As soon as the spawn are large enough to determine their species they are separated and the different varieties placed in ponds by themselves.

From these ponds they are sold to the natives, who come from distant parts of the country where there is a scarcity of fish. They carry them to their homes and place them in artificial ponds, each household having at least one, where they are fed on pigs' blood, and, as they grow large, upon worms, small frogs, &c. The carp is the most valued by the Chinese for cultivation, because it is more easily transported from place to place, and is the most profitable on account of its food properties. It is said that if properly cared for they will weigh 4 pounds the first year and attain their full growth in five years, when they will weigh from 25 to 30 pounds.

UNITED STATES CONSULATE,

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65.—FISH-CULTURE IN CHINA.

By ISAAC F. SHEPHARD.

[Dispatch No. 111 to the State Department.]

In accordance with the request of Minister Young, I have investigated the subject of fish-culture in my consular district, and regret that I can obtain only very meager results. I have consulted natives and foreigners alike, and have, through an interpreter, sought for and examined books that treat of the topic. These last give no details and no statistics, only referring to the fact that fish are cultivated by artificial means, for the purpose of securing food for the populace. From the varied sources it is shown that fish-culture is extensively pursued in this region, by gathering the seed from the Yangtse River, and transferring it to the numerous inland lakes that abound. Many of these are permanent bodies of water, and many others are formed by the periodic overflow of the large river which inundates the country in all directions for many miles. These lakes are all stocked from the Yangtse, and the business of taking the seed-fish, transporting to the cultivating waters, feeding and recapturing for market or use is one of great extent, although no statistics are available by which to estimate it.

The seed taken is not the spawn of the fish, but infinitesimally small fish themselves. These are caught by sinking nets along the shores of the Yangtse, and when captured are transferred to tanks attached to fish-boats, and thence to larger receptacles, usually large water kongs. The nets used are of extreme fineness, so that scarcely perceptible fish cannot escape through the meshes. They are fed on hard boiled yolks of eggs, wheat, bran, and bean flour, and on this food they flourish and